

PATENT  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(Case No. 05-720-US2)

In application of )  
J. Kouvettakis, et al. ) Examiner: Reema Patel  
Serial No. 10/559,981 )  
Filed: September 5, 2006 ) Group Art Unit: 2812  
For: GeSn Alloys and Ordered Phases ) Confirmation No.: 6588  
With Direct Tunable Bandgaps )  
Grown Directly on Silicon )

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-14501

**CONSENT OF ASSIGNEE UNDER 37 C.F.R. § 1.48(a)(5)**

Dear Sir:

As an officer of the Arizona Board of Regents, a corporate body organized under Arizona Law, acting on behalf of Arizona State University, the assignee of the above-referenced application, and having the power to act on its behalf, I hereby consent to the change of inventorship that is being requested herewith for the referenced application.

In accordance with 37 C.F.R. § 3.73(b), a copy of the executed assignment of the application to the Arizona Board of Regents, a corporate body organized under Arizona Law, acting on behalf of Arizona State University from the currently named-inventors John Kouvettakis, Matthew Bauer, Jose Menendez, and John Tolle has been recorded in the assignment records of the Office Reel/Frame: 019558/0544 in order to establish chain of title in the application. This executed assignment was recorded by U.S. Patent Office on July 11, 2007. Also attached to this consent are an executed statements under 37 C.F.R. § 1.48(a)(2) from Chang Wu Hu and Ignatius S.T. Tsong who are being removed as an inventor by the present request.

Date: 3/16/09

Respectfully,  
By: Beth H. Israel  
Beth H. Israel  
Associate Vice President for Research

**DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATION**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**GESN Alloys and Ordered Phases With Direct Tunable Bandgaps Grown Directly on Silicon**

the specification of which is attached hereto unless the following space is checked:

was filed on September 5, 2006 as United States Application Serial Number or PCT International Application Number 10/559,981.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s):

	<u>Number</u>	<u>Country</u>	<u>Day/Month/Year Filed</u>
1.	PCT/US04/018961	PCT	June 14, 2004

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

	<u>Application Number</u>	<u>Filing Date</u>
1.	60/478,480	June 13, 2003

I hereby appoint the practitioners associated with the Customer Number provided below to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and I direct that all correspondence be addressed to that Customer Number.

Customer Number: 020306  
Principal attorney or agent: David S. Harper  
Telephone number: 312-913-0001

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first inventor: John Kouvetakis

Inventor's signature: J. Kuvetakis Date: 3/13/09  
Residence: 7032 E. Indigo, Mesa, Arizona 85207 USA  
Citizenship: USA  
Post Office Address: 7032 E. Indigo, Mesa, Arizona 85207 USA

Full name of second joint inventor: Matthew Bauer

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 6783 NE Vining Way, #1136, Hillsboro, Oregon 97124 USA  
Citizenship: USA  
Post Office Address: 6783 NE Vining Way, #1136, Hillsboro, Oregon 97124 USA

Full name of third joint inventor: Jose Menendez

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 309 E. 14<sup>th</sup> Street, Tempe, Arizona 85281 USA  
Citizenship: USA  
Post Office Address: 309 E. 14<sup>th</sup> Street, Tempe, Arizona 85281 USA

Full name of fourth joint inventor: John Tolle

Inventor's signature: J. Tolle Date: 3/9/09  
Residence: 1489 S. Dove Street, Gilbert, Arizona 85233 USA  
Citizenship: USA  
Post Office Address: 1489 S. Dove Street, Gilbert, Arizona 85233 USA

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first inventor: **John Kouvetaakis**

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 7032 E. Indigo, Mesa, Arizona 85207 USA  
Citizenship: USA  
Post Office Address: 7032 E. Indigo, Mesa, Arizona 85207 USA

Full name of second joint inventor: **Matthew Bauer**

Inventor's signature: Matthew Bauer Date: 3/9/09  
Residence: 274 Wilcox St, Hillsboro, Oregon 97124  
Citizenship: USA  
Post Office Address: 274 Wilcox St, Hillsboro, Oregon 97124

Full name of third joint inventor: **Jose Menendez**

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 309 E. 14<sup>th</sup> Street, Tempe, Arizona 85281 USA  
Citizenship: USA  
Post Office Address: 309 E. 14<sup>th</sup> Street, Tempe, Arizona 85281 USA

Full name of fourth joint inventor: **John Tolle**

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 1489 S. Dove Street, Gilbert, Arizona 85233 USA  
Citizenship: USA  
Post Office Address: 1489 S. Dove Street, Gilbert, Arizona 85233 USA

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first inventor: **John Kouvetaakis**

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 7032 E. Indigo, Mesa, Arizona 85207 USA  
Citizenship: USA  
Post Office Address: 7032 E. Indigo, Mesa, Arizona 85207 USA

Full name of second joint inventor: **Matthew Bauer**

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 6783 NE Vinings Way, #1136, Hillsboro, Oregon 97124 USA  
Citizenship: USA  
Post Office Address: 6783 NE Vinings Way, #1136, Hillsboro, Oregon 97124 USA

Full name of third joint inventor: **Jose Menendez**

Inventor's signature: J. Menendez Date: 4/21/09  
Residence: 309 E. 14<sup>th</sup> Street, Tempe, Arizona 85281 USA  
Citizenship: USA  
Post Office Address: 309 E. 14<sup>th</sup> Street, Tempe, Arizona 85281 USA

Full name of fourth joint inventor: **John Tolle**

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 1489 S. Dove Street, Gilbert, Arizona 85233 USA  
Citizenship: USA  
Post Office Address: 1489 S. Dove Street, Gilbert, Arizona 85233 USA

PATENT  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(Case No. 05-720-US2)

In application of )  
J. Kouvetakis, et al. ) Examiner: Reema Patel  
Serial No. 10/559,981 ) Group Art Unit: 2812  
Filed: September 5, 2006 )  
For: GeSn Alloys and Ordered Phases ) Confirmation No.: 6588  
With Direct Tunable Bandgaps )  
Grown Directly on Silicon )

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-14501

**STATEMENT IN SUPPORT OF THE REQUEST TO CORRECT INVENTORSHIP**  
**UNDER 37 C.F.R. §1.48(a)(2)**

Sir:

I, Chang Wu Hu, submit this statement in support of the request under 37 C.F.R. §1.48(a)(2) to correct the inventorship of the above-identified application.

I hereby state that the error of including me as an inventor on the above-identified application occurred without deceptive intention on my part.

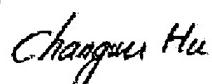
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectful

Dated: April 15, 2009

By: \_\_\_\_\_

Chang Wu Hu



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(Case No. 05-720-US2)

In application of )  
J. Kouvetakis, et al. ) Examiner: Reema Patel  
Serial No. 10/559,981 )  
Filed: September 5, 2006 )  
For: GeSn Alloys and Ordered Phases ) Confirmation No.: 6588  
With Direct Tunable Bandgaps )  
Grown Directly on Silicon )

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-14501

STATEMENT IN SUPPORT OF THE REQUEST TO CORRECT INVENTORSHIP

UNDER 37 C.F.R. §1.48(a)(2)

Sir:

I, Ignatius S.T. Tsong, submit this statement in support of the request under 37 C.F.R. §1.48(a)(2) to correct the inventorship of the above-identified application.

I hereby state that the error of including me as an inventor on the above-identified application occurred without deceptive intention on my part.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully,

Dated: 3/16/09 By: (Signature)

Ignatius S.T. Tsong